

Case 3271***Nematois australis* Heydenreich, 1851 (currently *Adela australis*; Insecta, Lepidoptera): proposed precedence over *Tinea aldrovandella* Villers, 1789**

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Abstract. The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the widely used specific name *Adela australis* (Heydenreich, 1851) for a common south European fairy moth (family ADELIDAE) by giving it precedence over the questionable senior synonym *Tinea aldrovandella* Villers, 1789. *T. aldrovandella* was not used after publication until 1980 when it was mentioned as a possible synonym of *A. australis*. Since 1980, some, but not all, authors have accepted this synonymy.

Keywords. Nomenclature; taxonomy; ADELIDAE; *Adela australis*; *Tinea aldrovandella*.

1. Villers (1789, p. 526) described *Tinea aldrovandella* from Europe. The precise type locality of this species remains unknown, although it is quite likely that the type material originated from France as most of the comments by Villers concern species distributed in that country (Werneburg, 1864). The whereabouts of Villers's collection remains unknown (Nielsen, 1985), and the types are most probably lost.

2. The identity of *Tinea aldrovandella* has not been discussed in any subsequent work. This species belongs to the family ADELIDAE, as indicated by the character 'antennis longissimis': the presence of a fascia excludes the genera *Nematopogon* Zeller and *Cauchas* Zeller from consideration. Eight of the 23 species of *Adela* Linnaeus and *Nemophora* Hoffmannsegg occurring in France (according to Leraut, 1997) possess a forewing fascia: in six species among them, the fascia is located in the middle of the forewing (between 0.5 and 0.6 of forewing length), which corresponds to the description ('fascia alba in medio'). The character 'alis violaceis' excludes three species with a brightly patterned forewing (*A. croesella* (Scopoli), *A. associatella* (Zeller), *N. congruella* Zeller), so only three species (*A. paludicolella* Zeller, *A. albicinctella* Mann, *A. australis* Heydenreich) more or less correspond to the original description. Two of these species (*A. paludicolella* and *A. albicinctella*) possess a small white spot at about 0.7 of the costa; in worn specimens this spot can easily be overlooked. The character 'Alae omneae, subtus fuscae, apice albae' is difficult to

attribute to any of the species mentioned. Therefore, we conclude that the identity of *T. aldrovandella* cannot be established with certainty, although *A. australis* (Heydenreich, 1851) seems to be the most plausible candidate.

3. Herrich-Schaeffer (1851, pl. 33, fig. 233) illustrated a male moth under the name *australis*. Herrich-Schaeffer's plates carry only specific names, which are not binominal and therefore not available; the descriptive text (on p. 103) did not appear until 1854 (see Hemming, 1937, p. 588 for the publication dates of vol. 5 of Herrich-Schaeffer's work). Although both the specific name and its application were due to Herrich-Schaeffer, the name was made available by reference to Herrich-Schaeffer's illustration by Heydenreich (1851, p. 131, published in the combination *Nematois australis*).

4. The name '*Tinea aldrovandella*' was not included in the comprehensive alphabetic list by Jung (1791) nor mentioned by either Hübner (1816–1825) or Herrich-Schaeffer (1855). Werneburg (1864, p. 234) was the only author to mention *Tinea aldrovandella* but indicating with the symbol '+' that the identity of the species was completely unknown. Subsequently, to the best of our knowledge, the name *aldrovandella* was not used after publication for any moth species until it was listed in a catalogue (Leraut, 1980), as a doubtful synonym of *A. australis*. At the same time, the name *australis* had been consistently used since 1851 by more than 20 authors, and it appeared in all major checklists and revisions (see Meyrick, 1912; Küppers, 1980; Vives Moreno, 1991, 1994; Karsholt & Razowski, 1996).

5. However, Rungs (1988) used the name *aldrovandella* as the senior synonym of *australis* in his checklist, without justifying this action. So far, to the best of our knowledge, only Leraut (1997) and Luquet (2000) have followed Rungs (1988).

6. In the interests of nomenclatural stability, we propose that the specific name of *Nematois australis* Heydenreich, 1851 be given precedence over that of *Tinea aldrovandella* Villers, 1789, whenever the two are synonyms.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *australis* Heydenreich, 1851, as published in the binomen *Nematois australis*, precedence over the name *aldrovandella* Villers, 1789, as published in the binomen *Tinea aldrovandella*, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *australis* Heydenreich, 1851, as published in the binomen *Nematois australis*, with the endorsement that it is to be given precedence over the name *aldrovandella* Villers, 1789, as published in the binomen *Tinea aldrovandella*, whenever the two are considered to be synonyms;
 - (b) *aldrovandella* Villers, 1789, as published in the binomen *Tinea aldrovandella*, with the endorsement that it is not to be given priority over the name *australis* Heydenreich, 1851, as published in the binomen *Nematois australis*, whenever the two are considered to be synonyms.

Acknowledgements

We are grateful to G. Robinson and K. Sattler for commenting on this application and improving the text.

References

- Hemming, F. 1937. *Hübner: A bibliographical and systematic account of the entomological works of Jacob Hübner, and of the supplements thereto by Carl Geyer, Gottfried Franz von Frölich and Gottlieb August Wilhelm Herrich-Schaeffer*, vol. 1, xxxiv, 605 pp.; vol. 2, xi, 274 pp. London.
- Herrich-Schaeffer, G.A.W. 1847–1855. *Systematische Bearbeitung der Schmetterlinge von Europa*, vol 5. *Die Schaben und Federmotten*. 394 pp., 124 pls. Regensburg.
- Heydenreich, G.H. 1851. *Lepidopterorum Europaeorum Catalogus Methodicus*. 131 pp. Leipzig.
- Hübner, J. 1816–1825. *Verzeichniss bekannter Schmettlinge*. 431 pp. Augsburg.
- Jung, C.C. 1791. *Alphabetisches Verzeichniss der bisher bekannten Schmetterlinge aus allen Weltheilen mit ihren Synonymen*, vol. 1. x, 338 pp. Marktbreit.
- Karsholt, O. & Razowski, J. (Eds.). 1996. *The Lepidoptera of Europe: a distributional checklist*. 380 pp. Stenstrup.
- Küppers, P.V. 1980. *Untersuchungen zur Taxonomie und Phylogenie der westpaläarktischen Adelinae* (Lepidoptera: Adelidae). 497 pp. Karlsruhe.
- Leraut, P. 1980. Liste systématique et synonymique des Lépidoptères de France, Belgique et Corse (Supplément à *Alexanor* et *Bulletin de la Société Entomologique de France*). 334 pp. Paris.
- Leraut, P. 1997. Liste systématique et synonymique des Lépidoptères de France, Belgique et Corse (deuxième édition). (Supplément à *Alexanor*). 526 pp. Paris.
- Luquet, G.C. 2000. Biocoenotique des Lépidoptères du Mont Ventoux (Vaucluse). (Supplément à *Alexanor*). xviii, 398 pp. Paris.
- Meyrick, E. 1912. Adelidae, Micropterygidae, Gracilariadae. *Lepidopterorum Catalogus*, 6: 1–68.
- Nielsen, E.S. 1985. A taxonomic review of the adelid genus *Nematopogon* Zeller (Lepidoptera: Incurvarioidea). *Entomologica Scandinavica Supplement*, 25: 1–66.
- Rungs, C.E.E. 1988. Liste-inventaire systématique et synonymique des Lépidoptères de Corse. [Supplément au tome 15 d'*Alexanor*]. 86 pp. Paris.
- Villers, Ch. de. 1789. *Caroli Linnaei Entomologia, Fauna Suecicae descriptionibus aucta; etc.* 2 vols. xvi, 656 pp., 6 pls. Lugduni.
- Vives Moreno, A. 1991. *Catálogo sistemático y sinonímico de los Lepidopteros de la Península Iberica y Baleares* (Insecta: Lepidoptera). 378 pp. Madrid.
- Vives Moreno, A. 1994. *Catálogo sistemático y sinonímico de los Lepidopteros de la Península Iberica y Baleares* (Insecta: Lepidoptera) (Segunda parte). x, 775 pp. Madrid.
- Werneburg, A. 1864. *Beiträge zur Schmetterlingskunde. Kritische Bearbeitung der wichtigsten entomologischen Werke des 17. und 18. Jahrhunderts bezüglich der darin abgehandelten Europäischen Schmetterlinge*. 2 vols. iv, 350 pp. Erfurt.

Acknowledgement of receipt of this application was published in BZN 60: 94.

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).